LIST OF FIGURES

| Figure 1. Index map of the Albemarle-Pamlico estuarine system2 |
|---|
| Figure 2. Distribution of wind speed and direction5 |
| Figure 3. Sources of freshwater discharge, tidal exchange, and isohalines in April and October7 |
| Figure 4. Distribution of calcium carbonate12 |
| Figure 5. Composite distribution of bottom samples |
| Figure 6. Composite distribution of bottom samples along souther margin of APES |
| Figure 7. Distribution of modal grain sizes19 |
| Figure 8. Percent sand in the Neuse River estuary21 |
| Figure 9. Percent sand in the Pamlico River estuary22 |
| Figure 10. Distribution of modal grain sizes in southern margin of APES22 |
| Figure 11A. Landsat Thematic Mapper, northern APES region, April 1, 1985 |
| Figure 11B. Landsat Thematic Mapper, southern APES region, April 1, 198524 |
| Figure 11C. Landsat Thematic Mapper, northern APES region, October 7, 198425 |
| Figure 11D. Landsat Thematic Mapper, southern APES region, October 7, 1984 |
| Figure 12. Suspended sediment concentration in Neuse River28 |
| Figure 13 Suspended sediment and salinity distribution in Neuse River in March and April, 1988 |